

**REGIONAL OVERSIGHT CONTRACT (ROC)
FOR
ZONE 5 (REGION IX)

STATEMENT OF WORK

PR-HQ-97-11697**

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I. INTRODUCTION

A. Background

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly referred to as Superfund, was enacted in December, 1980. The Superfund program provided the Environmental Protection Agency (EPA) with response authorities to facilitate the remediation of identified sites from which releases of hazardous substances have or might have occurred. The Superfund Amendments and Reauthorization Act (SARA) was enacted in October, 1986. Some important amendments, for Federal facilities, added by SARA include: requirements for Federal Agencies to comply with CERCLA and meet mandatory schedules for investigations and cleanups; an administrative record for every remedial action; a Federal Agency Hazardous Waste Compliance Docket; and evaluating and listing all Federal facilities which meet the criteria for listing on the National Priorities List (NPL).

Additionally, the EPA has the responsibility for assuring compliance with and corrective action under the Resource Conservation and Recovery Act (RCRA) and the Federal Facilities Compliance Act (FFCA) at all Federal facilities. EPA activities under RCRA include tracking the generation, transportation, storage, and disposal of hazardous wastes, the handling of municipal wastes, and the regulation of underground storage tanks, as well as the corrective action requirements for leaking Solid Waste Management Units (SWMUs).

EPA environmental activities regarding Federal facilities are almost identical to those at non-Federal sites. Special knowledge will be required for selected Federal hazardous waste programs, as well as the need for special expertise in selected waste streams and disposal practices unique to Federal Agencies, especially the Department of Defense (DOD) and Department of Energy (DOE).

B. Purpose and Objectives

Under this Statement of Work (SOW), the Regional Oversight Contract (ROC) Contractor shall support EPA in its mission of oversight and enforcement of both CERCLA and RCRA activities at Federal facilities and with non-Federal potentially responsible parties (PRPs) at Federal facility sites.

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In all contact with the public and Government officials, Contractor personnel shall identify themselves as Contractor employees working under contract to the EPA. Contractor identification badges shall be prominently displayed at all times and shall be clearly visible in all public settings.

The ROC Contractor shall:

- Provide support for EPA's remedial and corrective action programs at Federal facilities;
- Provide EPA support during remedial planning and remedial design and implementation; and,
- Provide support in evaluating site inspection data for Hazard Ranking System (HRS) scoring and NPL listing of facilities on the Federal Agency Hazardous Waste Compliance Docket.

The Contractor shall furnish the personnel, services, materials, equipment, knowledge, and expertise to successfully complete the tasks required under the contract.

For the purpose of this SOW, "support" means providing technical expertise, advice, and data to EPA concerning the Federal facility and PRP activities described. EPA will make all final determinations and decisions concerning these activities.

The ROC Contractor shall ensure that the personnel it provides to perform the tasks in this SOW have a thorough knowledge of all applicable Federal, state, and local environmental laws, regulations, guidance, and policies. As necessary, the Contractor shall consult EPA about and shall comply with the Agency's interpretation of Federal and other legal requirements applicable to tasks under this SOW. During contract performance the Contractor shall ensure that the personnel it provides to perform the tasks in this SOW utilize and incorporate all new laws, regulations, guidance, or policies which are applicable to the efforts conducted under the terms of this contract.

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IV. RCRA COMPLIANCE ACTIVITIES

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The following activities apply to Federal facilities requiring RCRA activities to achieve RCRA compliance and to Federal facilities which must undergo assessment for issuance or renewal of permits or procedures related to the Federal Facilities Compliance Act.

Enforcement and Compliance

EPA has responsibility for assuring compliance with, and corrective action under, RCRA. RCRA enforcement includes inspections of regulated generator, transporter, and treatment, storage or disposal (TSD) facilities.

The Contractor shall assist EPA in compliance monitoring at Federal facilities. The Contractor shall conduct inspections, collect and analyze sample materials, and review corrective action measures. The Contractor shall provide full substantiation for any findings resulting from the inspections, analyses, or reviews. EPA will use the information gathered by the Contractor in determining whether the facility is in compliance with RCRA.

Permitting

Subtitle C of RCRA requires EPA to develop, promulgate, and implement regulations which control the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also provides for states to receive authorization from EPA to carry out a hazardous waste program in lieu of the Federal program.

The Contractor shall assist the EPA in reviewing applications for Federal hazardous waste facility permits, drafting permit conditions, and conducting facility assessments and site inspections to support implementation of RCRA permit provisions. The Contractor shall also evaluate corrective action permit provisions, closure, and post-closure plan review. The contractor shall provide full substantiation for all findings made. EPA will use the information gathered by the Contractor in determining whether the facility's permit may be approved.

Contractor Designation Requirement

In all contact with the public and Government officials, the Contractor shall identify themselves as Contractor employees

working under contract to EPA. The Contractor shall obtain RCRA inspection credentials and designation for use during inspections or site visits. Contractor identification badges shall be prominently displayed at all times and shall be clearly visible in all public settings.

A. Site Visits/Inspections

The Contractor, EPA's authorized representative, shall provide technical support to EPA in the conduct of inspections at Federal facilities as outlined in EPA guidance and procedures. These guidelines and reporting formats will be established with each work assignment (WA). The WA will specify whether the Contractor is to accompany an EPA inspector or conduct the inspection without the presence of an EPA employee. Upon completion of the inspection, the Contractor shall submit a report to EPA that includes factual information, observations, and technical opinions based on information obtained during the inspections. Based on the data contained in the Contractor's report, EPA will make a determination of the facility's compliance with applicable EPA statutes and regulations.

Inspections of various types of waste handlers, including generators, transporters, incinerators, tanks (above and under ground), and TSD facilities shall be conducted, in order to evaluate the ability of the Federal facilities to comply with regulations and the potential or extent of releases from these facilities. Decisions regarding which inspection and how extensive of an inspection is to be performed shall be made by EPA. The specific inspections included under this task are listed below.

The Contractor shall conduct:

RCRA Facility Assessments (RFAs)--to identify and make a preliminary evaluation on releases/potential releases of hazardous waste or constituents from SWMUs or areas of concern (AOCs), in accordance with EPA's Final RFA Guidance a copy of which will be provided to the contractor. This task includes conducting a preliminary review or assessment (PR or PA) based on existing information and a visual site inspection (VSI). The Contractor shall prepare a preliminary assessment report of the file review, highlighting information required but not available in files, draft a VSI notice letter requesting additional information from the facility, and prepare a final RFA report

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characterizing all waste management activities at the facility including completed R6CAPS forms for data entry by the Region. The Contractor shall submit the VSI notice letter to EPA for review and approval. The VIS notice letter will be signed by the appropriate EPA official and sent via an EPA mail system to the facility. Sampling and sample analysis may be conducted as well, if required by EPA. The Contractor shall be prepared to conduct this task.

Off-Site Policy Inspections--of TSDs which must be in compliance to accept CERCLA wastes that have been shipped from Superfund sites. The Contractor shall submit an inspection report of its findings.

Underground Storage Tanks (UST) Inspections--to assess petroleum releases from underground tanks. The task shall include field oversight to document and monitor compliance of a cleanup action for initial release response activities under 40 CFR 280.60, and site closure under 40 CFR 280.70 to 280.73. The Contractor shall review the owners' and operators' UST reporting and record keeping required by 40 CFR 280.34. The Contractor shall submit an inspection report of its findings.

Multi-Media Inspections--which is a comprehensive inspection that covers air and water program regulations, as well as RCRA regulated waste releases to the environment. This task will be coordinated with other programs. The Contractor shall submit an inspection report of its findings.

Land Disposal Restriction (LDR) Inspections--to perform a compliance review specifically targeted to the LDR regulations on testing, record keeping, notification or certification, and storage requirements. This usually entails a detailed review of manifests, operating records, logs and waste analysis data. An operation inspection shall also be performed by the Contractor to ascertain proper procedures. The Contractor shall submit an inspection report of the document review and site visit conducted.

Sampling Inspections--which include oversight of facility sampling procedures, splitting samples with the facility, or providing sample analysis. This task is usually and, may be, required under a RFA, and other inspections. The Contractor shall perform the tasks and submit the deliverables mentioned below for all inspections or site visits requiring sampling.

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During sampling inspections, or whenever samples are to be collected, the Contractor shall develop and submit a sampling and analysis plan to EPA for review, comment, and approval. The Contractor shall also submit a Quality Assurance Project Plan (QAPjP) and a site Health and Safety Plan (HSP) to EPA for review, comment, and approval. The QAPjP and site HSP are to be billed to Site-Specific Project Management. The Contractor shall assist in the sampling and analysis of all media and access technical expertise for unique situations such as explosives, chemical agents, or radioactive materials.

The Contractor shall record, in accordance with EPA documentation procedures, all details noted during each site visit or inspection and during sample collection efforts. The Contractor shall employ EPA approved protocols for sample storage considerations, chain-of-custody, sample document forms, labels, and shipping requirements for all collected samples. Upon completion of the inspection, the Contractor shall submit a record of all details noted during each visit and/or inspection and during sample collection effort.

EPA will generally utilize its Regional Laboratory or the Contract Laboratory Program (CLP) for sample analyses. Special sampling programs may be requested by the EPA to support investigations. If these laboratory facilities cannot meet the objectives of the sampling and analysis task, the Contractor shall propose another laboratory or subcontract for specific analyses, upon EPA's approval. The Contractor shall ensure that the promulgated methods are followed for the analysis (e.g., SW-846, Second Edition, New Toxicity Characteristic Leaching Procedures or TCLP, etc.).

The Contractor shall provide data validation for sample data obtained from sampling events. The Contractor shall submit a data validation report which assesses the QA/QC procedures used by other samplers and laboratories; and reports anomalies in the data received and inadequacies in the analyses procedures.

Furthermore, the Contractor shall include a data management plan for each sampling or sample analysis assignment. The data management plan shall describe the methods used to ensure that all data collected or generated are stored and reported in a systematic manner consistent with EPA's Geographical Information System (GIS) data requirements. These requirements include:

[1] unique identification code numbers for all monitoring and sampling stations;

[2] encoded location data using latitude and longitude;

[3] identifying, encoding, and storing in a database all sample analytical results, field measurements, and observations;

[4] ensuring that analytical results are correlated with respective sampling station location and descriptive information; and,

[5] storing this information in a database compatible with EPA Regional GIS.

B. RCRA Corrective Action Oversight

RCRA corrective action authority requires the investigation and cleanup of contamination at or from a facility, including releases from past disposal practices. Corrective action may be required under an enforcement order or as a permit condition.

The Contractor shall assist EPA with the review and evaluation of Federal facility submittals in relation to the Corrective Action Program at the facility. EPA will make the final determination of the effectiveness of the Federal facility's actions. The Contractor shall provide technical support to EPA in all phases of corrective action, which includes the tasks listed below.

The Contractor shall conduct:

RCRA Facility Assessments (RFAs)--to identify and make a preliminary evaluation on releases/potential releases of hazardous waste or constituents from SWMUs or areas of concern (AOCs), in accordance with EPA's RFA Final Guidance. (The same requirements apply for RFAs, as mentioned in Section A. Inspections/Site Visits.)

Risk Assessments--to evaluate the completeness and technical accuracy of any risk assessments conducted by the facility for any of the stages of the Corrective Action process. The Contractor shall apply current EPA Risk Assessment guidance. See Section VI. C. (Assessment of Risks) for additional information.

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RCRA Facility Investigations (RFIs) Workplan and Report Reviews--to evaluate the completeness and technical level of facility's investigation, sampling, and assessment plans. The Contractor shall review the workplans and reports for compliance with the corrective action requirements. The Contractor shall submit RFI comment reports on the facility plan reviews conducted. In addition, the Contractor shall adequately characterize the contamination and risks to human health and the environment in the RFI comment report.

Corrective Measures Studies (CMS) Workplan and Report Reviews--to evaluate the cleanup plan and performance standards in corrective measures proposed by the facility. The Contractor shall review the workplans and reports for compliance with the corrective action order or permit. The Contractor shall submit CMS comment reports on the facility plan reviews conducted.

Corrective Measures Implementation (CMI) Remedial Design (RD)--to evaluate the detailed construction plans and specifications to implement the approved remedy from the CMS at the facility, to review the implementation of long-term maintenance plans. (The same consideration factors apply for RD, as mentioned in Section VI.G.1. (Remedial Design Oversight).)

Corrective Action Management Units (CAMU)--to review requests for CAMUs and evaluate facilities minimum technology requirements, treatment standards and ground water monitoring requirements.

Interim Measures (IM) Workplan or Report Reviews--to evaluate interim measures implementation for mitigation of actual or potential threats to the environment and to evaluate the success of corrective measures implementation (CMI). The Contractor shall review the workplans and reports, including progress reports, for compliance with the corrective action order or permit. The Contractor shall submit IM comment reports on the facility plan reviews conducted.

Field Oversight--of the facility's corrective actions (RFI, CMS, IM, CMI), including construction activity or closure which is conducted voluntarily or under an enforcement order or permit. The Contractor shall assess compliance with orders, construction specifications, regulations, and safety plans; and report noncompliance to EPA. Field notes and photographs from the scene

shall be required to document the oversight. The Contractor shall be prepared to conduct sampling or split sampling with the facility while on-scene. (The same requirements apply for sampling, as mentioned in Section A. Inspections/Site Visits.)

Underground Storage Tank (UST) Evaluation--to assess petroleum releases from underground tanks. The task shall include field oversight to document and monitor compliance of a cleanup action for initial release response activities. (The same requirements apply for UST, as mentioned in Section A. Inspections/Site Visits.)

The Contractor shall provide assistance in other areas including: conducting sampling and analysis activities; assessing compliance with EPA and state standards for Federal hazardous waste generators, transporters, and TSD facilities; and preparing special reports and studies related to current and future waste management programs.

C. Technical Review, Analysis, Evaluation, and Support

Technical reviews of documents are primarily reviews of technical studies or plans for operation or clean-up of a facility. This task also includes review of waste minimization and pollution plans developed by facilities seeking or complying with permits.

The Contractor shall provide technical assistance to the EPA in evaluating the RCRA compliance status of a facility by reviewing facility information and site-specific data; and evaluating the extent of, or potential for, releases from SWMUs at Federal facilities. The Contractor shall also assist EPA in maintaining databases of facility compliance data. Technical review deliverables shall include reports, summaries, and recommendations. All deliverables shall contain a full substantiation of the Contractor's comments and/or recommendations. EPA will utilize this information in making enforcement decisions. The technical support to be provided includes the tasks listed below.

The Contractor shall conduct:

Technical Review of Documents--This task includes evaluating the facility's performance of the following tasks, which are carried out under RCRA enforcement orders or permits: [1] review

and evaluate the draft and final RFI, CMS, and IM workplan and reports for compliance with the corrective action order or permit. (The same requirements apply for RFI, CMS and IM as mentioned in Section B. RCRA Corrective Action Oversight.); [2] review progress reports submitted during the RFI, CMS, and IM phases; and, [3] review and evaluate workplans, progress reports, and final reports for compliance with CMI requirements. The Contractor shall submit comment reports of its findings to EPA for Agency review and approval.

Closure Plan (CP) Reviews--to evaluate compliance with the requirements of 40 CFR Part 265 Subpart G; the technical adequacy of soil or ground water sampling, analytical results and conclusions presented in the CPs; and appropriateness of clean closure standards. The Contractor shall review closure, post-closure, contingency, waste analysis, and ground water monitoring or leak detection plans submitted by the facility. The Contractor shall evaluate plans according to closure certification requirements and relevant EPA guidance (provided to the Contractor by EPA), and draft notices of deficiencies (NODs) itemizing the additional work required of the applicant. The Contractor shall submit comment reports of its findings to EPA for Agency review and approval.

Geological and Hydrogeological Analyses--The purpose of hydrogeological, geological, geophysical, or hydrological studies, soil or sediment studies, modeling, and engineering tests is to provide additional data and analyses during permit review, corrective action negotiations, or litigation. The Contractor shall analyze the relationships between the physical surroundings and hydrogeological settings and the wastes to advise EPA on appropriate protective measures (e.g., permit conditions, corrective actions, or penalty assessments). The Contractor shall provide experts in the above disciplines who have experience and a thorough understanding of RCRA (especially corrective action) and the geological and hydrogeological conditions in the localities of the facilities assigned. The Contractor shall submit comment reports of its findings to EPA for Agency review and approval.

Permit Reviews and Analyses--This task includes drafting or reviewing RCRA permit, closure, and variance applications for completeness and technical adequacy as required by RCRA regulations. EPA will make the final determination as to completeness and adequacy. The applications will cover a variety

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of hazardous waste practices including storage in containers or tanks, treatment in tanks, thermal and biological treatment processes, disposal in landfills, surface impoundments, injection wells, land application, ocean dumping, or other miscellaneous units.

The Contractor shall provide personnel with expertise in environmental, chemical, and mechanical engineering, computer modeling, geology, hydrogeology, soil science, epidemiology, and other fields necessary to comprehensively review permits, closure plans, variances, and related materials such as exposure information reports, and to advise EPA on the tasks below. The Contractor shall use checklists, and prepare letter reports of their findings for: [1] initial completeness review, evaluating whether sufficient information is included in the application to conduct a full technical evaluation; and [2] technical evaluation of whether the facility has provided the technical evidence necessary to meet the RCRA permitting standards.

The Contractor may be tasked with providing a written evaluation of the responses of applicants to NODs and making recommendations for further action. All recommendations will be accompanied by a detailed statement of facts and substantiation. EPA shall make the final decision regarding the presence of deficiencies and the need for action to be taken. The Contractor shall also assist EPA in follow-up meetings with applicants and community groups.

Permit reviews include applications for Research Development and Demonstration (RD&D) permits. The Contractor shall evaluate proposed technologies and advise EPA whether the technologies satisfy the regulatory requirements for new and innovative technology. EPA shall make the final decision.

RCRA Facility Plan Reviews--to evaluate the completeness and technical level of facility's ground water monitoring, sampling, and assessment plans. The Contractor shall submit a report of its findings to EPA for Agency review and approval.

Waste Determinations--to evaluate and characterize wastes using RCRA or state hazardous waste criteria. The Contractor shall submit a characterization report to be used by EPA in determining whether the waste is hazardous under either state or Federal regulations.

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Special Studies for New Initiatives--The Contractor shall perform special studies as determined by EPA to support Headquarters and Regional initiatives, pursuant to the Federal Facility Compliance Act. The Contractor shall analyze any previous studies to identify any data gaps requiring special studies; these may include field and laboratory activities. The Contractor shall report all data gaps to EPA and the Agency will determine whether to require the Contractor to conduct subsequent studies.

Facility Profiles for the Stabilization Initiative--The goal of the Stabilization Initiative is to prevent or minimize the further spread of contamination at RCRA facilities, while long-term corrective action remedies are pursued. EPA requires Contractor assistance in preparing data profiles of each Federal facility site to be stabilized. The information on each site will be extracted from existing site information (RFA report, CEIs, etc.) The Contractor shall also provide experts in hydrogeology, chemistry, engineering, etc., to join with EPA staff as a technical review panel to review stabilization proposals and design plans. EPA maintains the final approval for stabilization proposals.

V. SITE ASSESSMENT SUPPORT

A. Federal Facility CERCLA Assessment Support

The Contractor shall review pre-NPL Preliminary Assessment/Site Inspection (PA/SI) documents presented to EPA by Federal facilities under CERCLA/SARA and the Defense Installation Restoration Program (IRP) for consistency with CERCLA/SARA, the NCP, the HRS, and all relevant site assessment guidance, policy, and procedures. The Contractor shall provide comments to EPA. EPA will review the Contractor's comments and make the final determination.

Federal facility CERCLA assessment support shall include: a Preliminary Assessment (PA) and/or Site Inspection (SI) review, or the performance of a PA and/or SI at a Federal facility as directed by EPA. The Federal facility PA/SI review does not require any type of site reconnaissance or sampling on the part of the Contractor; it only involves a review of information supplied by the Federal agency. In some cases, non-sampling data shall be gathered by the Contractor to fill data gaps that the

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Federal agency is unable or unwilling to provide. Under rare circumstances, the Contractor will be required to actually perform the PA and/or SI at the Federal facility, in accordance with the appropriate guidance.

1. The Contractor shall review site-specific materials prepared by the Federal facility and provided to the Contractor by EPA, including the PA and/or SI report, utilizing the following documents: OSWER Directive 9345.0-01A - Preliminary Assessment Guidance, PA/SI Checklist, Site Inspection Guidance, Regional Guidance, and other supporting documents.

2. The Contractor shall identify to the Region any necessary information not provided by the Federal facility; in some cases, under EPA's direction, the Contractor shall be required to fill in missing data gaps if the facility fails to provide the information to EPA.

3. The Contractor shall complete a draft HRS Score of the site, following the prescribed formulas provided by EPA.

4. The Contractor shall complete the Regional Federal Facility Review Form, including recommendation for further action(s) to be taken at the site; references and HRS score sheets shall be attached to the report. EPA will make the final decision regarding the requirements for further actions to be taken at the site.

5. The Contractor shall incorporate EPA comments and finalize the PA/SI Review document for final EPA review. This document must be suitable to represent the public record.

B. Hazard Ranking System (HRS) Scoring for Federal Facilities

The Contractor shall prepare full HRS documentation packages in accordance with EPA's Hazard Ranking System regulations contained in 40 CFR Part 300, Final Rule, December 14, 1990. This is further defined in EPA OSWER Directive 9345.1-07 (November 1992) "The Hazard Ranking System Guidance Manual." EPA will utilize the information provided in the HRS packages in determining whether these sites should be proposed for the NPL. EPA will conduct training to familiarize the ROC Contractor with the requirements of the HRS.

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1. The Contractor will meet with EPA to discuss and advise the Agency on the best technical approaches (e.g., sampling locations) that would produce the most defensible HRS data, and to make initial recommendations on HRS scoring approaches for EPA approval. EPA will make all final decisions regarding the use of an HRS scoring approach.

2. The Contractor shall prepare a draft HRS Package according to EPA guidance (including site summary, computerized HRS score sheets, documentation record, figures, maps, and references). The Contractor shall discuss these efforts with the EPA Regional NPL coordinator.

3. It may be necessary for the Contractor to collect additional sampling data to adequately develop the HRS package.

4. Upon receipt of EPA's comments provided by the Region, EPA-Headquarters, the EPA Headquarters HRS Quality Assurance Contractor, and other interested parties (as directed by the Region), the Contractor shall revise and re-submit the HRS Package for EPA review and approval.

5. EPA will make all final decisions regarding whether a site should be proposed for the NPL.

C. Federal Agency Hazardous Waste Compliance Docket

The docket is updated as often as every six months in the Federal Register. EPA Headquarters submits a list of revisions for the docket to the Regional Docket Coordinators for review. The Regional Docket Coordinators are all EPA employees. Each Regional Docket Coordinator is responsible for approval of the regional information for the National Federal Facilities Hazardous Waste Docket. The revisions include corrections, deletions, and additions to the docket. The Contractor shall support the Regional Docket Coordinator by reviewing the submittals to assure that all sites which are supposed to be added to the docket have been included and by making sure that there is complete documentation as to why the Federal facility sites were added to the docket. EPA will make all final decisions concerning these revisions. In examining proposed revisions, the Contractor shall:

- Identify any privately owned facilities that are now government operated;

- Identify facilities that do not have identification numbers;
- Identify any duplicate listings;
- Verify data with new docket entries such as the correct address, correct Federal Agency, correct site name, and appropriate documentation; and,
- Verify that sites are not Small Quantity Generators;

The Contractor shall provide a written summary of the docket review for use by the EPA Regional Docket Coordinator.

VI. OVERSIGHT COMPLIANCE OF REMEDIAL ACTIVITIES ON THE FEDERAL FACILITY

A. Overview

The Contractor shall provide technical expertise, advice, and information concerning Federal facility and PRP investigations and response activities to EPA. EPA will utilize this information to ensure compliance with the governing documents, including interagency agreements (IAGs), administrative orders, consent decrees, or other proposals agreed upon by the Federal, state, or local government and with applicable laws, regulations, guidance and policy. The Contractor shall review and provide recommendations and corresponding justifications regarding the technical adequacy of documents, reports, work plans, proposals, correspondence, models, and other technical submittals including, in the Contractor's opinion, whether or not such documents, reports, work plans, proposals, correspondence, models, and other technical submittals have been submitted in accordance with applicable governing documents. EPA will make all final decisions regarding the technical adequacy and compliance of documents, reports, work plans, proposals, correspondence, models, and other technical submittals with applicable governing documents.

The Contractor shall monitor and evaluate the activities at the site and make recommendations to EPA whether such work is in accordance with applicable governing documents. For Federal facilities, the Contractor's activities shall be restricted to

providing oversight support to the EPA of the facility's performance of the activities described below. EPA will make all final decisions regarding compliance of work with applicable governing documents.

B. RI/FS Support Activities

1. Scoping Support

The Contractor shall support EPA with any or all of the following activities. Once the scoping effort is complete, EPA will utilize the below described information to be provided by the Contractor in making decisions regarding additional activities.

a. Collect and Review Existing Site Data

Locate, consolidate, format review and summarize all existing data on the site. The review includes EPA record of past releases, PA/SI data, HRS Scoring data, local well drillers' data, and data on the geographic, geological, hydro-geological, and geophysical setting of the site.

b. Visit Site

Participate in EPA site visits and inspections. The purpose of the site visits will be to collect visual information on site conditions and contamination. Document the visit with photographs and with a detailed log of observations. This information shall be submitted to EPA.

c. Review Conceptual Site Model(s)

Review available site data, and, after the site visit, review or develop the conceptual site model. The conceptual site model consists of the following components: history of site use, a map of the area surrounding the site, current use category, roads, surface water, wetlands, population, etc.; maps and cross-sections of the site's surface features, geology, hydrology; a map with an outline of source areas and the area of contamination, including sampling locations; contaminants of concern, existing and potential exposure pathways, and a detailed fate and transport analysis. Specific direction concerning the conceptual site model will be provided in the work assignment.

2. Review Federal Facility and PRP Workplans

The Contractor shall review, or in some cases prepare, a draft RI/FS scope of work which translates the identified RI/FS and Applicable, Relevant and Appropriate Requirements (ARARs) objectives into instructions for the Federal facility or PRP to collect needed data and to perform the RI/FS. The Contractor shall be tasked with reviewing and providing comments to EPA regarding an RI/FS scope of work that has been drafted by the Federal facility or PRP. Alternatively, in those instances which the Contractor actually prepares a draft RI/FS scope of work, the Contractor shall submit the document to EPA for comment and approval.

In addition, EPA will provide such guidance to the Contractor who shall use the guidance in reviewing/drafting Federal facility and PRP work plans. This includes, RI/FS guidance, QAPP guidance or the Regional Standard Operating Procedure (SOP), Model Statement of Work for an RI/FS, examples of workplans, and other documents. EPA will make all final decisions regarding the RI/FS scope of work.

The Contractor shall conduct a technical review of any segments of the draft workplan, or the complete draft workplan, within the schedule established by EPA. Workplan review includes evaluating whether the Federal facility or PRP has structured the draft in the format specified in RI/FS guidance and has followed the RI/FS scope of work, including the technical criteria, specific statistical sampling density and requirements and procedures, appropriate sample analyses, QA/QC plans and instructions and Health & Safety Plan. The Contractor shall also comment on whether the draft schedule for completing the RI/FS will comply with the schedule set forth in the Federal Facility Agreement (FFA). The Contractor shall prepare detailed comments noting all discrepancies and deficiencies in the draft workplan. The Contractor shall also support EPA in reviewing and consolidating other comments received on the draft workplan, such as those made by the state, and shall review subsequent draft workplan submittals to determine if comments have been addressed. The Contractor shall also review subsequent draft workplan submittals and provide EPA with a report discussing the resolution of all comments.

EPA will evaluate for further consideration the information provided by the Contractor and then utilize the

information to ensure that the RI/FS scope of work will be consistent with EPA's objectives and that the workplan addresses the RI/FS scope of work. EPA will present its recommendations to the Federal facility or PRP during workplan development. The Contractor shall be available to provide technical input during these presentations. EPA will review and approve the final workplan submittal.

3. Oversight of field activities/Conducting field activities

The Contractor shall support EPA with any or all of the below responsibilities:

a. Compliance with the Federal Facility Agreement or Order

The Contractor shall be familiar with the FFA or order between the EPA, state, and Federal facility or PRP conducting the RI/FS, and shall, upon EPA's request, monitor and make recommendations to EPA as to whether all technical requirements and deadlines of this agreement are met.

If requested to monitor compliance, the Contractor shall inform the EPA whenever it appears that violations have occurred, and shall also maintain a record of these apparent violations and submit this record to the EPA as a part of the oversight report. EPA will make all final determinations and decisions regarding compliance with the FFA or Order.

b. Oversight of field activities

The Contractor shall support EPA during oversight of complex field operations. The WA will specify whether the EPA WAM, his/her authorized representative, or any other Agency personnel will be present. Depending on site conditions and scope of the RI/FS, specific oversight expertise in a number of professions shall be required, such as environmental engineering, hydrology, geology, and toxicology. The Contractor shall be familiar with all components of the RI/FS workplan and other guidance and instructions provided by the Federal facility or PRP. The Contractor shall assign staff to oversee specific field operations, as specified in the oversight work assignment. The Contractor shall monitor and evaluate whether all technical requirements for conducting the RI/FS are met and that the

workplan is followed by the Federal facility or PRP. The Contractor shall maintain a detailed log of all field observations, including all apparent incidents of non-compliance observed, and shall advise the EPA when these incidents occur. The field log shall be provided to the EPA on a periodic basis. EPA shall make all final decisions regarding whether all technical requirements for conducting the RI/FS are met and whether the workplan is followed by the Federal facility or PRP.

c. Field QA Responsibilities

The Contractor shall perform assigned QA/QC responsibilities which focus on the oversight of Federal facility or PRP compliance with the governing QAPjP for the site or with Standard Operating Procedures (SOP). These guidances specify sample acquisition, chain of custody and sample analysis procedures, validation procedures, and procedures for performing laboratory audits.

The Contractor shall also be required to obtain split samples. The Contractor shall plan to utilize the Contract Laboratory Program or the Regional laboratory for sample analysis. If these facilities are unable to perform the analysis, the Contractor shall identify and propose another laboratory and, after EPA consent, subcontract the specific analyses. The Contractor shall record all details noted during each inspection and during sample collection efforts. The Contractor shall employ EPA approved protocols for sample storage considerations, chain-of-custody, sample document forms, labels, and shipping requirements for all collected samples. The results of these analyses can be compared to Federal facility or PRP analyses results. The Contractor shall review all Federal facility or PRP records containing information on analytical analyses performed, and shall convert this information to the format needed for entry into EPA's non-CLP analytical services tracking system, and to provide tracking information to the EPA on a monthly basis. (See also Section IX.)

4. Remedial Investigation Report Review

The Contractor shall review the technical aspects of the draft Remedial Investigation Report. This review entails commenting to EPA as to whether the report is structured in the format specified in RI/FS guidance and in accordance with RI/FS workplan. The Contractor shall review the report for technical

accuracy. This consists of a review of all report information on sampling, analyses, and QA procedures for accuracy, by comparing it to guidance specifications and to the oversight records on these procedures. It also includes recommendations as to whether report conclusions are supported by sample analyses values, or if any sample analyses results are disregarded in the conclusions. In addition, the Contractor shall recommend whether site characterization objectives have been met. Objectives include understanding of site setting, an adequate characterization of the nature and extent of contamination in all affected media, identification of source areas and hot spots, and evaluation of the fate and transport of contaminants.

The Contractor shall prepare detailed comments noting all discrepancies and deficiencies in the draft report and shall comment on the adequacy of the data collected and the adequacy of the site characterization, with recommendations for additional field work, if warranted. In addition, the Contractor will be tasked to support EPA in reviewing and consolidating other comments received on the draft report.

EPA will also review the draft Remedial Investigation Report, and with the data provided by the Contractor, EPA will determine if the RI is consistent with Agency objectives and identify any deficiencies. EPA will make its recommendations regarding the RI to the Federal facility or PRP. The Contractor shall be available to provide technical input during these presentations. The Contractor shall also review subsequent RI draft reports and opine whether EPA recommendations have been incorporated. EPA will make the final determination regarding the adequacy of the Remedial Investigation Report.

C. Assessment of Risks

The Contractor shall apply current EPA risk assessment guidance including EPA's Superfund Exposure Assessment Manual (SEAM), the Integrated Risk Information System (IRIS), the Health Effects Assessment Summary Tables (HEAST), the Interim Final Risk Assessment Guidance for Superfund (RAGS) as well as Regional guidance. For PRP - lead sites, the Contractor shall prepare the Baseline Risk Assessment. For Federal Facility-lead sites, the Contractor shall review the Baseline Risk Assessment. The Contractor shall fully substantiate its findings so that EPA may assure itself of the accuracy of the analyses. The Contractor shall support EPA with any or all of the responsibilities listed

below:

1. Baseline Risk Assessment

The Contractor shall review or prepare the Baseline Risk Assessment, which identifies and characterizes the toxicity and effects of the hazardous substances present, describes contaminant fate and transport, evaluates the potential for human exposure, and assesses the risk of potential impacts or threats on human health. In addition, as a component of the Baseline Risk Assessment the Contractor shall review or prepare an Environmental Assessment, which assesses the risks of potential impacts or threats to the ecological environment (including both flora and fauna). EPA will review the Baseline Risk Assessment and use it as a basis for the Agency's determination of whether or not remedial action is necessary and as justification for performing any remedial action that may be required. Specific Contractor responsibilities, as they apply to the components of the Baseline Risk Assessment, are described in items 2 - 3 below:

2. Review of Preliminary Site Data

During the RI scoping phase, the Contractor shall review all site data including site history, information on site setting, potentially exposed population and environment, PA/SI data, HRS Scoring data, and the ATSDR Site Health Assessment/consultation. After review of this data, the Contractor shall identify data gaps (data needed to complete the risk assessment). In addition, while considering concentrations of specific contaminants identified at the site, the Contractor shall identify ARARs and support in the development of preliminary remediation goals (PRGs) for human health and ecological pathways. For PRP sites, the Contractor shall, upon EPA's request, develop a technical memorandum, outlining potential PRGs and data gaps. The Contractor shall submit this information to EPA for comments prior to the development of the workplan. Once EPA determines this information is appropriate, it will be used by EPA to ensure that the data gaps and exposure pathway considerations will be addressed by the RI.

3. Human Health Risk Assessment

Development of the Human Health Assessment consists of four sequential components described below. For Federal

facilities, the Contractor shall review the human health risk assessment prepared by the Federal facility for completeness and adequacy and provide any comments to EPA. For PRP-lead sites, the Contractor shall conduct the human health risk assessment which includes the above identified items. EPA will review and utilize the Human Health Assessment together with any comments provided by the Contractor so that the Agency can determine the extent of human health risks associated with the site.

a. Data collection and evaluation

Review all data on hazardous substances found at the site, identify the contaminants of concern, and present the data in a tabulated format as directed by EPA. If requested for PRP-lead sites, prepare a technical memorandum listing all hazardous substances present at the site, and the Contractor's suggested contaminants of concern with the known ambient concentrations.

b. Exposure assessment and documentation

Identify or review data on actual and potential exposure points and pathways. For each exposure point, the release source, the transport media (soil, air, groundwater, etc.), and the exposure route (oral, dermal, etc.) shall be clearly delineated. Both present and future risks at the site shall be considered and weighed, using reasonable maximum exposure (RME) scenarios. For PRP-lead sites, submit to EPA for review and approval a draft technical memorandum describing the exposure scenarios with a description of assumptions made and the use of data, and describe or review the fate and transport models that will be used and the data used with these models. Representative data shall be utilized, and uncertainties associated with the models shall be addressed.

c. Toxicity assessment and documentation

Utilize information from IRIS, HEAST, and similar data bases to develop or review a toxicity assessment of the contaminants of concern. This assessment (report) shall include types of adverse health effects and/or environmental effects associated with chemical exposures (including potential carcinogenicity), relationships between magnitude of exposures and adverse effects, and related uncertainties of contaminant toxi-

city (e.g., the weight of evidence for a chemical's carcinogenicity).

Toxicity information from IRIS shall only be summarized in this section, with a reference to IRIS. The toxicity section shall include tables which summarize non-carcinogenic Reference Doses (RfDs) and carcinogenic slope factors for contaminants of concern. If the dermal exposure pathway is considered to be complete, this section shall also contain toxicity values to express absorbed doses.

d. Risk characterization

Integrate the ambient concentrations and average and reasonable maximum exposure assumptions with the information developed during the exposure and toxicity assessment, to characterize and quantify the current and potential risk to human health posed by the site. The risk characterization shall identify uncertainties associated with contaminants, toxicities, and exposure assumptions.

4. Environmental Assessment

In addition to the human health risk assessment, the risk to the environment from exposure to the contaminants shall be addressed. For PRP-lead sites, the Contractor shall be tasked to conduct the environmental risk assessment which includes the items identified below. For Federal facilities, the Contractor shall review the environmental risk assessment prepared by the Federal facility for adequacy and completeness and provide any comments to EPA.

The Contractor shall either prepare a technical memorandum that provides an environmental evaluation or review a technical memorandum that has been submitted to EPA by either the Federal facility or PRP. At a minimum, the environmental evaluation preparation or review shall include the ecological contaminants of concern, with an assessment of the effect of site contamination on any critical habitats and/or any endangered species. The Contractor shall fully substantiate and document the analysis in the technical memorandum. Information necessary to characterize the nature and extent of any environmental risk or threat resulting from the site shall also be provided. EPA will review the environmental risk assessment, the environmental evaluation memorandum, and any comments provided by the

Contractor so that EPA can determine the extent of human health risks associated with the site.

D. Treatability Study Oversight

The Contractor shall review and/or prepare Treatability Study Work Plans, Sampling and Analysis Plans, and Quality Assurance Project Plans. The Contractor shall observe, sometimes at remote locations, treatability studies conducted by either the Federal facility or PRP. The WA will specify whether the EPA WAM, his/her authorized representative, or any other Agency personnel will be present. This includes observation of work efforts related to the conduct of laboratory screening and bench-scale and pilot-scale treatability studies to study the suitability of remedial technologies or alternatives to site conditions and problems. The Contractor shall observe the performance of the treatability study and evaluate whether the Treatability Study workplan is adhered to and that applicable EPA guidance and instructions are followed. The Contractor shall inform EPA, in accordance with the time specified in the relevant work assignment, whenever it appears that activities are not consistent with the workplan and applicable EPA guidance. The Contractor shall also maintain a log which fully substantiates its position with regard to these apparent inconsistencies and submit this log to EPA as a part of the oversight report.

The Contractor shall observe the gathering of contaminated material for the study and shall evaluate whether the proper chain of custody and contaminants analysis procedures are employed prior to and after the material is treated. The Contractor shall monitor the disposal of the investigation-derived waste and evaluate whether the Federal and state off-site disposal requirements and policies are being addressed.

The Contractor shall be on location where the treatability test(s) is conducted and shall observe the actual test. The Contractor shall review the report on the treatability study for accuracy and shall provide comments and recommendations to the EPA concerning any possible discrepancies and when apparent non-compliance is observed.

The Contractor shall review treatability study test plans and procedures for technical adequacy.

The Contractor shall maintain a detailed log of all field

observations, including all apparent incidents where activities not consistent with the Treatability Study workplan and EPA guidance are observed, and shall advise EPA when these incidents occur. The field log shall be provided to EPA on a periodic basis as specified by EPA. EPA will review information provided by the Contractor so that EPA can determine the adequacy of the treatability studies and evaluate any potential deficiencies.

E. Review of Feasibility Study (FS) Report

The Contractor will review the technical and economic aspects of the draft FS Report within the EPA established schedule, as outlined in the WA. This includes commenting as to whether the report is structured in the format specified in EPA RI/FS guidance or as provided in the RI/FS workplan. The Contractor shall evaluate the accuracy of the FS and the conclusions presented. Specifically, the Contractor shall evaluate whether all applicable technologies are included in the discussion of preliminary remediation alternatives, and if treatability study findings are accurately addressed, if one was conducted. The Contractor shall review engineering data and cost analyses for accuracy of remedial technologies described and accuracy of cost projections, and the ARAR evaluation for each alternative. The Contractor shall review the documented remedial alternatives screening process and provide an evaluation as to whether viable technologies were omitted and if unsuitable technologies were recommended. Finally, the Contractor shall review the comparative analysis results of treatment choices against the evaluation criteria for accuracy and completeness. The Contractor shall prepare detailed comments on all discrepancies and deficiencies identified in the FS, and shall provide these comments to the EPA. In addition, the Contractor shall be tasked to support EPA in reviewing and consolidating other comments received on the draft FS, such as those made by the state. The Contractor shall fully substantiate its recommendations and provide all necessary supporting documentation.

EPA will review the draft FS together with information provided by the Contractor so that the Agency can determine if the FS is consistent with Agency objectives and to identify any deficiencies. EPA will make its recommendations regarding the FS to the Federal facility or PRP. The Contractor shall be available to provide technical input during these presentations. The Contractor shall also review subsequent FS drafts and evaluate whether EPA recommendations have been incorporated. EPA

will make the final determination regarding the adequacy of the FS.

F. Removal Oversight Activities

Typical activities include many of the same activities specified in the RI/FS oversight activities.

The Contractor shall support EPA in the oversight of removal actions. The WA will specify whether the EPA WAM, his/her authorized representative, or any other Agency personnel will be present. The Contractor may receive as little as a 2-day notification of the response required and shall be sufficiently mobilized within that time period to respond as required. The Contractor shall have streamlined procedures for health and safety, conflict of interest certification, and quality assurance for these activities, so as to be able to respond within the time specified in a work assignment. Occasionally, the Contractor shall be required to respond with less than 2-day notification.

For non-time critical removal actions, actions at the site will be covered by the Work Assignment Statement of Work (SOW), health and safety plan (HSP), operations plan, sampling and analysis plan, QA/QC plan, and other documents as required by the applicable governing documents (i.e., administrative orders, consent decrees, etc.), referenced guidance documents, and applicable regulations. The Contractor shall also be tasked to review an Engineering Evaluation/Cost Analysis (EE/CA).

EPA activities listed under RI/FS oversight may also be classified as removals (time-critical and non-time critical) and thus may be performed at sites not listed on the NPL.

G. Remedial Design/Remedial Action Oversight Activities

1. Remedial Design Oversight

The Contractor shall support EPA by reviewing and monitoring the technical aspects of the proposed remedial design approach. The Contractor shall follow up with a written report(s) fully substantiating its findings. EPA will utilize the information obtained (as described below) from the Contractor in evaluating the final design approach set forth by the Federal facility or PRP.

ROC Zone 5 (EPA Region IX) SOW

In all contact with the public and Government officials, Contractor personnel shall identify themselves as Contractor employees working under contract to the EPA. Contractor identification badges shall be prominently displayed at all times and shall be clearly visible in all public settings.

During the remedial design review, the Contractor shall consider the following factors:

- Technical requirements of the Record of Decision (ROD), ARARs, order or FFA;
- Generally accepted environmental protection measures and technologies;
- Standard professional engineering practices;
- Completeness, construct-ability and bid-ability;
- Applicable statutes, EPA policies, directives, and regulations;
- Evaluation of pre-design and design data;
- Evaluation of the proposed siting of the remedy, disposal site and mitigation areas and consideration of any site constraints or unique features;
- Design calculations to assess professional quality of design activities (achieved by spot checks); and,
- Whether the planning and construction schedules meet project completion goals.

In providing RD oversight to EPA, the Contractor shall conduct the following tasks. EPA will evaluate for further consideration the information provided by the Contractor and utilize this information to make determinations and other pertinent decisions:

- a. Review Remedial Design Workplan(s) and Sampling Plan(s)

ROC Zone 5 (EPA Region IX) SOW

Review and provide fully substantiated comments to EPA on the workplan(s), sampling and analyses plan(s), QAPjP(s), and other plans developed by the Federal facility or PRP which describe procedures for required sampling and other pre-design and design activities.

b. RD Field Oversight

The Contractor shall provide field oversight for pre-design and design sampling activities. The WA will specify whether the EPA WAM, his/her authorized representative, or any other Agency personnel will be present. The Contractor shall also observe sampling activities for compliance with the FFA, IAG, or settlement documents and approved sampling and analysis plan(s) and QAPjP(s). Any apparent deviations from the FFA, IAG, settlement documents, or the approved plans shall be verbally reported to EPA and then documented in a trip report which shall be submitted to EPA within the time specified in the work assignment.

i. Log of Observations

Maintain a diary or log of observations at the site, including interactions with all parties, results of field tests, concerns or discussions about conformance with the approved plans, and apparent deviations from the approved plans. Prepare letter reports documenting the sampling activities performed, any apparent deviations from the approved plans, and any concerns and potential problems noted by oversight personnel.

ii. Compliance Monitoring

Be familiar with the requirements of the FFA or order and monitor RD field activities for compliance with the requirements of the workplan. Inform the EPA when incidents of apparent non-compliance occur. EPA will review and utilize this information to determine whether the Federal facility or PRP was non-compliant with regard to RD and sampling activities, and, if necessary, make recommendations on how to correct the observed deficiencies.

c. Review of Sample Analyses

Review the sample analyses prepared by the Federal facility or PRP and identify data gaps. This also includes

conducting sample validation and lab audits to ensure that the analyses were carried out according to EPA guidelines and guidance.

d. Review of Remedial Design Data Reports

Review and provide comments to EPA on interim, draft, and final reports summarizing the results of sampling activities and data analyses performed for the pre-design and remedial design.

e. Review of Preliminary, Draft Final, and Final Design Documents

Review preliminary, draft final, and final design documents. This includes review, evaluation, and recommendations as to the adequacy of all final documents related to remedial design (e.g., plans, specifications, engineer estimates, and design analyses).

f. Other Technical Support

Provide technical support and comments on the development or review of RD-related documents such as contingency plans and operations and maintenance plans. EPA will review and approve all RD reports and documents, including comments provided by the Contractor.

2. Oversight of Treatability Studies

For those cases where a treatability study is required during the RD phase, the Contractor shall review treatability studies, test plans and procedures, and pilot tests for technical adequacy. The Contractor shall fully substantiate its proposed findings.

The Contractor shall observe treatability studies, which may be conducted at remote locations. The WA will specify whether the EPA WAM, his/her authorized representative, or any other Agency personnel will be present. This includes observation of work efforts related to the conduct of laboratory screening and bench-scale and pilot-scale treatability studies to study the suitability of remedial technologies or alternatives to site conditions and problems. The Contractor shall observe the performance of the treatability study and evaluate whether the

treatability study workplan is adhered to and that applicable EPA guidance and instructions are followed. The Contractor shall inform EPA, in accordance with the time specified in the relevant work assignment, whenever it appears that activities are not consistent with the workplan or applicable EPA guidance. The Contractor shall also maintain a log which fully substantiates its position with regard to these apparent inconsistencies and submit this log to EPA as a part of the oversight report.

The Contractor shall observe the gathering of contaminated material for the study and shall evaluate whether the proper chain of custody and contaminants analysis procedures are employed prior to and after the material is treated. The Contractor shall monitor the disposal of the investigation-derived waste and evaluate whether the Federal and state off-site disposal requirements and policies are being addressed.

The Contractor shall be on location where the treatability test(s) is conducted, and shall observe the actual test. The Contractor shall review the report on the treatability study for accuracy and shall provide fully substantiated comments and recommendations to the EPA concerning any possible discrepancies and when non-compliance is observed.

The Contractor shall also be tasked to review treatability study test plans and procedures for technical adequacy and shall follow up with a written report(s) fully substantiating its findings.

The Contractor shall maintain a detailed log of all field observations, including all apparent incidents where activities not consistent with the Treatability Study workplan and EPA guidance are observed, and shall advise the EPA when these incidents occur. The field log shall be provided to the EPA on a periodic basis, as specified by the EPA.

EPA will review the information provided by the Contractor so that EPA can determine the adequacy of the treatability studies and evaluate any potential deficiencies.

3. Remedial Action Oversight

During the remedial action, the Contractor shall provide technical support necessary to review and monitor the performance of the remedial action. The Contractor shall review

remedial activities and documents to evaluate and recommend whether they are consistent with the ROD, FFA, PRP order or consent decree, ARARs, approved design plans, specifications, Quality Assurance and Quality Control Plans, generally accepted engineering and construction practices, and applicable EPA policies. The activity shall be performed in a manner protective of public health and the environment. The Contractor shall follow up with a written report(s) fully substantiating its findings. EPA will utilize the information obtained (as described below) to ensure that the remedial action performed by the Federal facility or PRP is consistent with Agency objectives.

In all contact with the public and Government officials, Contractor personnel shall identify themselves as Contractor employees working under contract to the EPA. Contractor identification badges shall be prominently displayed at all times and shall be clearly visible in all public settings.

a. Review of Documents

The Contractor shall support EPA by reviewing all deliverables submitted by the Federal facility or PRP during the course of the remedial action, including those listed below:

- Remedial action workplan and construction schedules for reasonableness in approach to the implementation of the remedial design within the terms of the FFA, order or consent decree;
- Construction procurement specifications for technical adequacy and timeliness;
- Change orders, work directives, and modifications made by the Federal facility or PRP remedial action contractor for consistency with the FFA, order, or consent decree;
- Shop/record drawings, change orders and modifications to the design plans and specifications;
- Progress reports of the remedial action contractor and other reports on the schedule and progress of work;
- Monitoring data submitted to evaluate if the action levels have been exceeded and if so, verifying that

corrective actions were promptly taken;

- Other data required to be assembled and furnished by the remedial action contractor;
- Construction Quality Assurance Plan, Construction Health and Safety Plan and Operation and Maintenance and Monitoring Plan, if these documents are modified from those submitted during the RD phase; and,
- Superfund Completion Report which documents the completion of the remedial action.

b. Attendance at meetings

The Contractor shall be available to accompany EPA at the pre-construction conference, progress briefings, and other meetings to provide logistical and technical support to EPA.

c. RA Field oversight

The Contractor shall provide field construction oversight to monitor the general progress of the RA. The WA will specify whether the EPA WAM, his/her authorized representative, or any other Agency personnel will be present. The Contractor shall make on-site observations of the work in progress so that EPA can later evaluate whether the work is proceeding in accordance with the FFA, plans and specifications, and the Construction Quality Assurance/Quality Control Plans, and, in general, monitor the quality assurance program. If the Contractor observes any actions that the Federal facility, non-Federal PRP, or their Contractor take in interpreting contract documents in a way that may materially affect the work in progress or the intent of the plans and specifications, or any apparent deviations from the FFA, order or consent decree, or approved plans and specifications, the Contractor shall report these actions to EPA in accordance with the time specified in the relevant work assignment. The Contractor shall follow up with a written report fully substantiating its findings.

Oversight activities shall include monitoring the adherence to the Health and Safety plan and development and implementation of the QA/QC plan. Any activities observed that pose a threat to human health or the environment shall be immediately brought to the attention of EPA and followed up with

a written report.

At the request of EPA, the Contractor shall provide support for field sampling activities. These activities shall include characterizing, or supporting in the characterization of, site conditions prior to remedial action and to assess the degree of treatment achieved at each site in relation to the design for that site. Sampling activities shall involve the collection and analyses of air, soil, ground water, surface water and sediment. In some cases, radiation analysis will be required. This sampling includes both direct and oversight or split sampling activities to monitor the Federal facility's Contractors. The Contractor shall record all details noted during each inspection and during sample collection efforts. The Contractor shall employ EPA-approved protocols for sample storage considerations, chain-of-custody, sample document forms, labels, and shipping requirements for all collected samples. The Contractor shall plan to utilize the Contract Laboratory Program or Regional laboratory for sample analyses. If these facilities are not available, timely, or able to perform the analysis, the Contractor shall identify and propose another laboratory and, upon EPA consent, subcontract specific analyses. The Contractor shall coordinate this independent sampling with the EPA at all times to ensure compliance with the RD. (See also Section IX.)

The Contractor shall maintain a diary or log of observations at the site, including interactions with all parties, results of tests, site visits, and questions, concerns or discussions about conformance with the approved design plans and specifications. These diaries or logs shall be provided to EPA upon request. The format for these diaries or logs shall be consistent with EPA documentation procedures. If requested, this shall be supplemented with periodic photographs and special reports. The Contractor shall prepare monthly letter reports documenting construction progress, change orders, any deviations from the FFA, order or consent decree, approved plans and specifications, and any other potential problems noted by oversight personnel.

Should any events or activities during the RA present an imminent and substantial endangerment to the public health or welfare or the environment, the Contractor shall immediately verbally notify the EPA. The Contractor shall follow up with a written report fully substantiating its findings.

EPA will utilize this information to determine whether actions taken by the Federal facility or PRP are in compliance with the FFA, order or consent decree and, if necessary, to make recommendations on how to correct the observed deficiencies.

d. Inspections

The Contractor shall be available to attend the pre-final and final inspections, and to support EPA in reviewing the list of items requiring correction and verifying that all items have been completed or corrected. The Contractor shall document for EPA use all outstanding "punch list" items and any other items discussed during the inspection. The "punch list" shall be formatted to facilitate its use as a guide and to document the results of any follow-up inspections by EPA or Contractor personnel.

The Contractor shall coordinate independent sampling which will be used by EPA in evaluating compliance with the RD specifications and the cleanup standards identified in the ROD. Sampling may entail collection of treated media or emissions at specified intermediate points in the treatment train as well as the final product. Analytical results will then be compared with treatment or emission standards established in the RD to identify any areas where the system is operating outside of the specified ranges. The comparison reports shall be provided for EPA use, with apparent areas of non-compliance clearly identified. The Agency will make the final determination regarding compliance with EPA requirements.

H. Support for Post Remedial Action Activities

1. Operation and Maintenance Oversight

SARA requires the Agency to closely evaluate permanent remedies. New technologies are emerging which require special expertise for monitoring. The Contractor shall oversee the effectiveness of the implemented remedy and shall fully substantiate any findings or recommendations it has so that EPA can assess the situation and make appropriate decisions. Required oversight services shall include: field inspections,

sampling, sample analysis, data validation, development of health and safety plans and QA/QC plans, implementation of chain of

custody procedures, preparation of reports, evaluation of training of on-site personnel operating equipment associated with the RA, monitoring of the effectiveness of remedy, review any modifications of remedy; or the oversight of these activities. Services shall be required at different levels for different types of remedies and sites.

2. System Start-Up

The Contractor shall support EPA oversight efforts of RA system start-up by observing the initial operation of the plant, system, or process. This shall include observation of the start-up and shut down (including emergency shut down) and routine operating procedures. The Contractor will provide a detailed record of observations to the Agency. EPA will utilize this information in making determinations concerning system effectiveness and in making recommendations to correct deficiencies. The Contractor shall coordinate conformational sampling which will be used by EPA to confirm that clean up standards established in the ROD are met prior to the discharge of any treated material.

3. Five-Year Review

The Contractor shall support EPA in performing five-year reviews in accordance with OSWER Directive 9355.7-02, Structure and Components of Five-Year Reviews. The Contractor shall consider all current and past remedial activities at the site.

a. Document Review

The Contractor shall review documents and site files, as directed by EPA, to become knowledgeable with the history and status of the site. Specific documents shall include the following: the ROD, ROD Summaries, FFAs, consent decrees, closeout reports, operation and maintenance manuals and reports, ground water monitoring plans and the administrative record.

b. Standards Review

The contractor shall review ARARs in the ROD(s) and the ROC Summary(ies) and review Federal, state, or local regulations related to public health or the environment, promulgated subsequent to the ROD, for changes in standards.

c. Site Visit/Interviews

The contractor shall interview, or participate in interviews, as appropriate, of previous site staff/management, nearest residents to the site, PRPs, state and local government personnel, facility operating staff, O&M Contractors, or other personnel associated with the selection and implementation of the RA.

d. Site Inspection/Technology Review

The contractor shall conduct a management system review and technical compliance evaluation of specific elements of the RA required to protect human health and the environment. The scope of the site inspection shall include all components of the source control/ground water remediation necessary to evaluate whether each element of the ROD has been implemented and whether each component of the remedy is operating in accordance with its intended function. This information shall be submitted to EPA who will utilize it to make determinations concerning the effectiveness of the implemented remedy.

e. Five-Year Review Report

The contractor shall prepare a draft five-year review report or review a five-year review report, providing the information listed below. The Contractor shall fully substantiate all information provided to EPA. EPA will review and evaluate for further consideration the Contractor's draft report or review and use this information to determine whether the implemented remedy satisfies the completion requirements. EPA will approve the five-year review report. A discussion of the following shall be included in the report:

- Background information, including an introduction;
- Statement of remedial objectives;
- Summary of findings;
- Preparation of a review summary including technology recommendations, requirements for recommendation implementation and a general statement of protectiveness of the current remedy; and,
- Summary of requirements to serve as the basis for subsequent five-year review, if required.

VII. GENERAL NEGOTIATIONS SUPPORT

The Contractor shall provide technical support to EPA during the development of Agency negotiating strategy and during EPA's negotiations with the Federal facilities and PRPs. Contractor participation in actual negotiations shall be limited to providing technical advice and logistical support to Government personnel. EPA will utilize this information to support negotiating positions that the Agency has determined for itself, and to determine whether actions proposed by the Federal facilities and/or PRPs will be in compliance with FFAs, orders, or consent decrees. Under no circumstances shall the Contractor develop or make decisions regarding Agency negotiating strategy nor represent EPA during discussions. EPA will critically review and approve all documents prepared for negotiation purposes. The Contractor shall support EPA with the following assignments:

- Support in the preparation of technical documents for negotiations, including the scope and extent of technical requirements to be included in the scope of work;
- Provide technical support during PRP negotiations;
- Provide technical support during FFA negotiations. Due to the RCRA/CERCLA overlap and the comprehensive nature of FFAs, the Contractor will review both RCRA and CERCLA documents and provide technical recommendations to EPA in accordance with the WA. EPA will determine its negotiation position using the Contractor-provided information as it deems necessary and appropriate;
- Provide a technical review of Federal facility or PRP offers and workplans (this includes evaluating the technical and financial ability of the PRP to conduct the proposed response action);
- Provide technical support to EPA during the review of settlements, including mixed funding, de minimis, and cash-out offers;
- Publishing of notices, meetings, and review and response to comments following EPA review and approval;
- Support in collecting and developing information for

the Agency's use in evaluating and preparing Non-binding Preliminary Allocations of Responsibility (NBARs) and for the Agency's use in support for subpoenas. EPA will determine the NBARs;

- Coordinate natural resource damage determinations and NEPA related activities;
- Evaluate the Federal facility's or PRP's workplans with regard to the technical requirements and schedules set forth in pertinent legal documents such as the ROD, FFA, orders, and Decrees;
- Support in the review of technical reports and other data submitted by a Federal facility or PRP for scientific or engineering validity; and,
- Prepare summary documents of meetings between EPA and the Federal facility or PRP representatives, and other related parties.

VIII.EXPERT WITNESS/LITIGATION SUPPORT

The Contractor shall provide technical support to EPA in the informal or formal dispute resolution process under CERCLA 120 or in the event of litigation under CERCLA Section 121. The Contractor shall support in the assembly of all documents that support the EPA's position in the dispute. The contractor shall obtain via the Contracting Officer and WAM the EPA's General Counsel's written permission before performing legal services for the Agency.

A. Expert Witnesses/Expert Consultants (Experts)

The Contractor shall locate and secure qualified experts to support EPA actions in science, technical, financial, or other fields, such as:

toxicology (e.g., aquatic, human, invertebrate, mammalian)
epidemiology
medicine (e.g., medical opinion, veterinary opinion)
pharmacology
public health
health physicist

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risk assessment
bioaccumulation/biotransfer/environmental fate
biostatistics
botany/plant pathology
ecology (e.g., marine, food chain, agricultural)
biology/zoology
geology/hydrogeology
geological engineering
soil chemistry/soil physics
remedial engineering/civil engineering
hydrology
chemistry (e.g., analytical, organic, physical, process)
chemical engineering
materials engineering
structural engineering
chemical transport and fate (e.g., pathways, modeling)
sampling procedures
analytical methods
modeling
industrial hygiene
aerial photographic interpretation
regulatory and policy development
hazardous waste management technologies
financial analysis/auditing
accounting
other allied fields

The candidates shall possess the special qualifications needed by the Agency for particular enforcement actions; in most cases experts who are preeminent in their fields will be required, at times on short notice.

The Contractor shall perform a search in specific fields for potential experts having certain knowledge and experience, possibly relating to specific contaminants, geographic areas, or sites. In the search process, the Contractor shall incorporate the use of the Office of Waste Programs Enforcement (OWPE) on-line Expert Resources Inventory System (ERIS Database) as a part of the identification of candidates in scientific and technical areas. Financial and accounting experts are not currently included in the ERIS Database, but are among the least likely to be required under this SOW. [For access to the ERIS Database, contact the ERIS Coordinator.]

Although "name selection" of a particular individual is

allowed for CERCLA actions, [Section 109(e) of SARA permits "any executive agency (to) use competitive procedures or procedures other than competitive procedures to procure the services of experts"], when several candidates have been identified by the screening criteria provided or similar criteria, the Contractor shall narrow the list to between three and five for final consideration. In doing this, the Contractor secures and evaluates the professional resume (including experience relating to hazardous wastes as well as negotiation/litigation experience) of each candidate, makes recommendations to EPA regarding their willingness and availability to serve, methods for procurement, and the fee schedule, and identifies any personal conflicts of interest. EPA will consent to candidate selection.

The Contractor shall provide the EPA WAM with appropriate resumes, and when there is more than one final candidate a rationale which discusses the basis for choice of a final candidate. EPA will review and provide consent for the final selection of the expert. The Contractor shall also send copies of the resumes for candidates receiving final consideration to the ERIS Coordinator, along with the site name and selected expert for updating of the ERIS Database.

The Contractor shall furnish recommendations to EPA regarding whether an expert's credentials and expertise in any resume or other information provided to the Contractor is accurate so that the Agency can make the final determination regarding selection of the expert. The Contractor shall research and provide to the EPA Contracting Officer information regarding conflicts of interest that a potential expert may have. Where there may be issues that must be kept confidential and not disclosed outside EPA or the Contractor, the Contractor shall provide technical expertise in the preparation of confidentiality agreements or special certifications to be completed by the expert. EPA shall make all final determinations regarding the scope of the issues to be kept confidential.

Procurement methods for experts have variations. Not all experts can be subcontracted by the Contractor due to restrictions under the individual's regular employment or governmental employment. Most experts working for educational institutions, consulting companies, or as independent consultants can be subcontracted. Persons working in private industry may be able to obtain a waiver for outside employment and would then be able to accept a subcontract. Persons working for EPA or other

governmental agencies (Federal, state or local) may be available only under special request from EPA management at an appropriate level. If a candidate from EPA or another government agency is a possible final candidate for selection as an expert, the Contractor must notify and coordinate with the EPA WAM before proceeding with the assignment.

Scientific or technical experts shall perform all necessary tasks related to their area of expertise, which may include:

- Preparation of a written statement or affidavit describing the expert's background and education qualifications, publications, and experience in the field of hazardous waste;
- Visiting the hazardous waste site and other locations pertinent to the site/case;
- Reviewing government, PRP, and public comments and reports relevant to the site/case, including the administrative record, and provide an evaluation either orally or in writing;
- Reviewing the literature for information relevant to the site/case;
- Participating as a technical advisor to EPA/DOJ in connection with negotiation/litigation;
- Presenting opinions and factual information in deposition of a case;
- Giving testimony as an expert witness providing written or oral testimony in Federal court and/or administrative hearings; and,
- Performing tasks described elsewhere in this SOW.

B. Administrative Dispute Resolution

The Contractor shall provide technical support to EPA in implementing Section 120 of SARA and the dispute resolution process outlined in a specific FFA or Memorandum of Understanding (MOU). For PRP (non-Federal) oversight assignments, the Contractor shall support EPA in the technical aspects of the

dispute resolution process outlined in the Administrative Order on Consent or Consent Decree.

In each FFA, MOU, or, in the case of PRP (non-Federal) oversight assignments, Administrative Order on Consent or Consent Decree, there are specific procedures and timeframes established for resolution of disputes between the Federal facility or PRP, EPA, and, in certain cases, the state. Although such agreements are developed from model language, the specific conditions are negotiated for each agreement. At the request of the WAM, the Contractor shall provide technical support for the preparation of a written statement of dispute. Such support would consist of participating in meetings/conference calls and preparing draft technical memoranda. Contractor identification badges shall be prominently displayed at all times and shall be clearly visible in all public settings. Contractor's shall also orally identify themselves as contractors. Support of subject matter experts, as identified above, may be required.

C. Alternative Dispute Resolution

For PRP (non-Federal) oversight assignments, the Contractor shall support EPA in implementing Section 122 of CERCLA and Alternative Dispute Resolution (ADR) actions. The Contractor shall prepare technical support documentation related to mediation, non-binding fact-finding, and non-binding arbitration (see "Final Guidance on Use of Alternative Dispute Resolution Techniques in Enforcement Actions" dated August 14, 1987). The Contractor shall be present during the ADR process to provide technical advice to EPA, if required. Under no circumstances shall the Contractor represent EPA during any phase of the ADR process.

D. Document and Data Management

The Contractor shall utilize a database which will manage and track all supporting documentation for negotiations, dispute resolution, or litigation. The database shall track correspondence, reports, pertinent samples, interviews, records, and other documents and data as requested by EPA.

The Contractor shall collect and summarize all available cost documentation incurred in the performance of this contract, using existing cost documentation systems.

IX. OTHER TECHNICAL SUPPORT

A. Community Relations Activities

The requirements for community relations in Section 117 of SARA, the NCP and Community Relations in Superfund: A Handbook, January 1992 (Attachment 13) shall be followed in the planning and implementation of community relations. Additional policy and guidance relating to administrative records, state involvement, Federal facilities, the Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee, and other enforcement specific guidance provide important additional requirements which shall be followed in preparing work as requested by the EPA regional staff.

The Contractor shall support EPA in the development, planning, and implementation of community relations activities at enforcement-lead sites, including Federal facilities. Community relations activities shall be integrated closely with all remedial/removal response activities. The objectives of this effort are to achieve community understanding of the actions taken by the Agency and the Federal facility, to establish mechanisms so the Agency has early and continuous opportunities to obtain community input, and to seek comment on the alternative or recommended remedies. The Contractor shall provide technical assistance to the community as required by EPA. The Agency will review and approve all materials prepared by the Contractor prior to distribution of any materials to the public, as well as any agenda for public meetings, briefings, conferences, or workshops prior to the time that these meetings, briefings, conferences, or workshops take place.

The activities for which Contractor support will be needed include:

- Preparing general or site specific fact sheets;
- Providing support for planning and conducting public meetings and technical discussions involving the public;
- Providing support for planning and conducting public briefings, conferences, workshops, community conferences, site specific advisory boards, restoration advisory boards and training workshops; and,

- Writing and/or placing newspaper notices regarding the availability of site-related documents and schedules for public meetings.

Guidance on Community Relations at Federal Facility Sites is forthcoming and activities required or recommended by this guidance will be covered under this contract. The Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee provides a framework for how community relations may be implemented at Federal facilities. The work defined above will also apply to the Removal Program.

B. Base Closure

The Contractor shall provide technical and community relations support in identification and assessment of emerging Federal waste management and clean-up technologies, regulatory issues related to implementation of Base Closure Program, the effectiveness of remediation technology selection process, and other site specific issues. The Contractor may be involved in community involvement projects. Interface will be required with EPA, state, and local officials, Federal agencies and affected communities.

C. Project-Specific Technical Support

The Contractor shall be required to provide specific technical support on a case-by-case basis.

1. Meeting Support

Provide technical and logistical support to EPA in the preparation for, and the conduct of, meetings on such topics as community relations, technology transfer, alternative remedial technologies and RODs, as well as progress briefings and other meetings relevant to the site WA.

2. Federal Facility or PRP Work Groups

Develop and participate in Federal facility or PRP work groups. These work groups may focus on a variety of issues, including such topics as value engineering and evolving or innovative treatment technologies.

3. Analysis of innovative characterization and

remedial technologies

Analyze innovative characterization and remedial technologies proposed for use at Federal facilities or other Superfund sites. Review test plans and conceptual design reports, as well as the results of initial work efforts.

4. Evaluation of equivalency demonstrations

Evaluate equivalency demonstrations of alternative remedies for sampling, treatment, and disposal methods.

5. Review of related documents

The Contractor shall review and provide recommendations and corresponding justifications regarding the technical adequacy of site related documents, reports, work plans, proposals, correspondence, models, and other technical submittals including, in the Contractor's opinion, whether or not such documents, reports, work plans, proposals, correspondence, models, and other technical submittals have been submitted in accordance with applicable governing documents. EPA will make all final decisions regarding the technical adequacy and compliance of documents, reports, work plans, proposals, correspondence, models, and other technical submittals with applicable governing documents.

D. Sampling and Analytical Support Services

The Contractor shall provide sampling and analytical support, including long term monitoring.

1. Environmental Sampling

The Contractor shall collect environmental samples. Typical activities the Contractor shall be tasked to perform include: field sampling, ground water sampling, surface soil sampling, soil boring sampling, permeability sampling, surface water and sediment sampling, air monitoring and biota sampling. The Contractor shall record all details noted during each inspection and during sample collection efforts. The Contractor shall employ EPA approved protocols for sample storage considerations, chain-of-custody, sample document forms, labels, and shipping requirements for all collected samples.

2. Analytical Support

Most analysis will be performed under the existing Office of Emergency and Remedial Response CLP contracts or by the Regional laboratory. The Contractor shall be responsible for planning and relaying needs to the Region, reserving space and providing coordination support between EPA and the CLP program, preparing Special Analytical Services (SAS) requests, and performing sample preparation and shipment. The Contractor shall conduct activities in accordance with its EPA approved QAPP and QAPjP. These plans shall be consistent with QA/G-2: EPA Guidance on Preparing Quality Assurance Program Plans and QA/R-5: EPA Guidance on Preparing Quality Assurance Project Plans or other specified guidance.

In the event the CLP or Regional laboratory are unable to perform the analyses, the Contractor shall perform physical, chemical and biological analyses for samples collected from or related to hazardous waste sites. The Contractor shall identify and propose a laboratory and upon EPA consent, subcontract for specific analyses. The laboratory used shall be of acceptable quality; for example, they must pass EPA performance evaluation samples. The work will involve CERCLA or RCRA sites which are the subject of ongoing or potential enforcement actions. The Contractor shall also be subject to laboratory and/or field audits by the EPA.

3. Data Validation

The Contractor shall provide data validation capabilities (process by which the quality of the data and chain of custody are verified) and review of the usability of the data. The Contractor shall perform data validation in accordance with EPA Headquarters and Regional Guidelines.

4. Data Evaluation

The Contractor shall compile analytical data. Typical activities shall include data reduction and tabulation and data evaluation. If required, the Contractor shall be tasked to format the data for input into a Regional Data Base.

5. CLP/Non-CLP Tracking

The Contractor shall review all Federal facility or PRP records containing information on analytical analyses performed, and shall convert this information to the format needed for entry into EPA's CLP/non-CLP analytical services tracking system. The Contractor shall also provide tracking information to the EPA on a monthly basis.

CLIN 0002 - DATA MANAGEMENT SERVICES

VIII. Data Management Services

A. The contractor shall support EPA's Federal Facilities Revitalization and Reutilization Office (FFRRO) information management functions, including support for management of data collected in the course of investigations and enforcement activities conducted under CERCLA, RCRA, other applicable site remediation enforcement statutes, and other mandates and statutes.

a. Provide support in developing automated and written management information systems and record management systems in support of the internal management of the Superfund program.

b. Develop, maintain, enhance and operate regional tracking systems, databases, spreadsheets, reporting systems and subroutines for conversion of existing data between systems.

c. Provide support in further enhancement of existing systems; design and development/revision of automated reports for project and enforcement tracking activities.

d. Provide support in developing, preparing, and modifying GIS reports for sites in the Superfund program

e. Conduct review of FFRRO software, hardware and databases, perform market search of commercially available hardware, software, databases and technologies and provide recommendations for improvement of the FFRRO data management.

F. Provide support in the structuring and updating of the FFRRO homepage.

The data management work assignment will specify whether the deliverable must be formatted in hard copy, electronic via disk

or e-mail, or in electronic format with HTML (Hyper-Text Mark-up Language) coding for display over the World Wide Web. Upon completion of the contract or work assignment at EPA's discretion, any data bases developed by the contractor for EPA, will be transferred to EPA.

Electronic deliverables under this CLIN must be executable using current EPA software, e.g., WordPerfect, dBASE III+, Lotus 123, SAS, Focus, Windows, Oracle, InfoMaker, PowerBuilder; and mainframe Local Area Network (LAN)/Wide Area Network (WAN) systems, e.g.: CERCLIS systems and any successor systems, such as CERCLIS III. Subsequent versions and/or new software packages shall be incorporated in the efforts conducted in this SOW. These software packages shall routinely be used to enter, track, or retrieve information developed during the course of this SOW. The contractor shall adhere to Agency ADP standards, e.g.: EPA System Design and Development Guidance, A, B, C; National Data Processing Division Operations Policies Manual; Federal Register - FIRMR; and IRM Program Profiles.

The contractor shall provide support utilizing information stored in CERCLIS/WasteLAN, mainframe LAN/WAN information system and databases, and any other related databases or information management systems.

CLIN 0003 - WRITTEN AND ELECTRONIC DELIVERABLES

IX. Written and Electronic Deliverables

The contractor shall prepare and submit the deliverables specified in: 1) Sections F (Reports of Work) and G of the basic contract; 2) each site specific individual work assignment; 3) each data management support work assignment; and, 4) in each ad hoc reporting work assignment.

An ad hoc report, commonly referred to as a "fire drill", provides data or information in a format that is other than the deliverables specified in: 1) Sections F (Reports of Work) and G of the contract; 2) a site specific individual work assignment; or, 3) a data management support work assignment.

CLIN 0004 -SITE-SPECIFIC PROJECT MANAGEMENT

X. Project management for work assignments include planning, monitoring, coordinating, and communicating. Typical activities the Contractor shall perform include:

- Attending scoping meeting(s) with EPA to develop a work assignment workplan;
- Developing a cost estimate, at the sub-task level, for the performance of each work assignment;
- Reviewing EPA-provided background documents relevant to each work assignment;
- Monitoring costs, resources, schedules, and deliverables and submitting a monthly site-specific project management progress report to EPA in accordance with Attachment 7;
- Preparing a site-specific Health and Safety Plan (HSP) and submitting to EPA for review. (In no way does EPA's review of the Plan constitute approval on behalf of the Government.) The site-specific HSP would recommend specific options for employee training, protective equipment, medical surveillance requirements, and standard operating procedures. The PRP HSP may be adopted by the Contractor as appropriate;
- Preparing a draft Field Sampling Plan (FSP) for confirmatory split sampling activities and submitting to EPA for review, comment, and approval;
- Preparing a draft QAPjP in accordance with QA/R-5 (December 1980) or future EPA guidance and submitting to EPA for review, comment, and approval;
- The contractor shall provide and maintain a qualified staff of personnel to meet the requirements of the Statement Of Work. The contractor shall provide training to keep its personnel abreast of changes to the science and/or technology associated with the requirements of the contract. In addition, the contractor shall ensure that its personnel receive appropriate safety, health and environmental training in accordance with Federal, state and local requirements prior to assigning any task that require such

training. The contractor shall provide documentation of such training upon the request of the Project Officer and/or Contracting Officer.

The Government will not directly reimburse the cost for contractor employees to meet or maintain minimal contract requirements or to obtain and sustain an appropriate level of professionalism. Any direct charges for training will only be considered for reimbursement under this contract by compliance with the procedures set forth in paragraph (2) below.

There may be occasions when it is determined to be in the best interest of the Government to reimburse the contractor for the direct cost of training associated with a requirement that represents a unique Government need at the time of contract award. When such circumstances occur, the contractor shall secure the Contracting Officer's prior written approval by submitting a written request through the Project Officer that includes, at a minimum the following information:

- a. Individual to be trained (Identify position and job duties under contract.)
- b. Description of circumstances necessitating the training. (Describe the specific change to the performance requirements. Identify by number and title of the work assignment(s) that will benefit from training and describe in detail how the training relates to the Statement Of Work and job duties under the contract.)
- c. Estimated cost (Include a cost breakdown. Explain why this is the most cost effective means to fulfill the contract requirements.)

The Contracting Officer will provide the contractor with written approval or disapproval of the request. Approval of work plans that include training as an other direct cost element shall not be construed to mean the training is approved; i.e., separate written approval shall be obtained pursuant to the terms of this clause. Training billed as a direct cost shall be disallowed by the Contracting Officer unless approved pursuant to the terms of this clause.

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- Attending, as directed by EPA, seminars, lectures, and training, conducted by universities, institutions, corporations, associations, and governmental entities that discuss the most current technologies, solutions, approaches, and research on technical problems and situations that exist on sites covered by ROC Zone 5 work assignments; and,
- Conducting Work Assignment close out activities. The typical activities the Contractor will be tasked to perform include:
 - File storage and transfer
 - Microfiching/microfilming of files, or conversion to electronic media.

CLIN 0005 - PROGRAM MANAGEMENT

X. Program Management

The Contractor shall plan, monitor and control the performance of all work assignments issued under this contract, and ensure that all work assignments are completed in a timely, cost-effective and highly competent manner. Program Management costs are those costs incurred for efforts which do not benefit a site. It is not project management costs or costs associated with technical effort in performing a work assignment. Program management does not include data management support. Program management includes personnel, material, equipment supplies and labor costs directly attributable to the contract that are not site specific costs.

Examples of these costs are: contract mobilization, project planning, labor costs incurred in providing and managing equipment required to perform the statement of work, on-going administrative and clerical support functions, general contract progress meetings, non-site specific quality assurance/quality control activities, financial monitoring reviews, participating in Agency audits, maintenance of Confidential business Information (CBI) control systems, management of sub-contractors, and contract close-out activities.

Examples of activities that are treated as Program Management costs include the following:

A. Contract Implementation

At the end of the time period, the Contractor shall have completed and delivered, except where so noted, the following tasks and products:

- Establish an office to receive and process work assignments, including installing a telephone and providing an on-site Program Manager within thirty (30) calendar days of award;
- Establish work assignment progress controls for monitoring work assignment completion dates and expenditure limits for level-of-effort (LOE) and dollars within thirty (30) calendar days of award;
- Establish accounting and cost control procedures, including the computer programming necessary to provide standardized invoices and progress reports. The accounting system shall include the appropriate labor classifications defined under the contract and shall continuously update the information;
- Develop and submit a contract-wide health and safety plan within thirty (30) calendar days of contract award;
- Establish an EPA Contract Lab Program (CLP) point of contact and gather necessary forms, hardware and software to implement requirements of the CLP and non-CLP tracking systems; and,
- Award team subcontracts within ten (10) calendar days of award.

B. Contractual Integrity

The Contractor shall ensure the integrity of the contract. The Contractor shall perform the contractual integrity activities in accordance with all applicable regulations and guidance. The Contractor shall:

- Perform a conflict of interest (COI) search and certification prior to the acceptance of a work assignment in accordance with its EPA approved COI Plan;
- Develop a Confidential Business Information (CBI) control system for obtaining and maintaining clearances, as well as

securing and controlling all paper and electronic files created; and,

- Establish QA/QC procedures for sampling and analysis when using the Contract Laboratory Program (CLP), mobile, and fixed support laboratories and contract-wide health and safety issues, such as OSHA mandated site operations, which affect multiple assignments and which cannot be otherwise apportioned.

C. Information Control and Reporting

The Contractor shall maintain a Work Assignment Tracking System. The Contractor shall track work assignment issuance, performance, and billing for the contract through the use of a computerized management information system (MIS) which utilizes software that is approved and in general use by EPA, such as Wordperfect, DBase, Lotus 123, Timeline, CERCLIS, RCRIS, IDEA, ARCINFO, ORACLE, FFTS and OMB A-106 prime systems and successor systems. The tracking system shall be compatible with CERCLIS and other Agency systems supporting enforcement planning, financial management, and tracking activities as specified by the Project Officer (PO). The Contractor shall provide special reports and analyses of the work and costs resulting from the performance of the contract as directed by EPA.

D. Internal Contractor Data Management Control

The Contractor shall perform all automated data processing in accordance with the latest version of the EPA ADP manual and EPA Systems and Design Development Guidance, both of which are available for review in the Regional EPA Library.

The electronic deliverables under this CLIN must be executable using current EPA software, e.g., WordPerfect, dBASE III+, Lotus 123, SAS, Focus, Windows, Oracle, InfoMaker, PowerBuilder; and mainframe Local Area Network (LAN)/Wide Area Network (WAN) systems, e.g.: CERCLIS systems and any successor systems, such as CERCLIS III, Timeline, RCRIS, IDEA, ARCINFO, ORACLE, FFTS and OMB A-106 prime systems and successor systems and any other related databases or information management systems. Subsequent versions and/or new software packages shall be incorporated in the efforts conducted in this SOW. These software packages shall routinely be used to enter, track, or

retrieve information developed during the course of this SOW. The contractor shall adhere to Agency ADP standards, e.g.: EPA System Design and Development Guidance, A, B, C; National Data Processing Division Operations Policies Manual; Federal Register - FIRMR; and IRM Program Profiles. Any hardware shall also be compatible with EPA standard hardware, such as IBM compatible microcomputers.

The contractor shall manage data it collects in the course of investigations and enforcement activities conducted under CERCLA, RCRA, other applicable site remediation enforcement statutes, and other mandates and statutes. Data collected in the course of RCRA/CERCLA investigations and enforcement activities include results of environmental measurements, characteristics of hazards, remedial action schedules, compliance and enforcement plans and accomplishments, corrective action costs, and applicable regulations and criteria. Data management involves data screening, formatting, input, quality assurance and validation of data, processing and selective retrieval, preparation of special displays and providing and implementing a plan for a secure system to ensure the integrity of enforcement related records. The principal sources of the data will include enforcement remedial investigations/feasibility studies, facility inspection and other facility reports, other site investigation reports, risk and endangerment assessments, and reports from states and other EPA Regions and Headquarters.

The contractor shall transfer the results of their efforts electronically, in addition to the hard copy, directly to EPA. Upon completion of the contract, or sooner at EPA's discretion, any data bases developed by the contractor for EPA, will be transferred to EPA.

E. Administrative Support Services

All functions necessary to perform administrative and technical support activities under this contract shall be provided on an ongoing basis for the duration of the contract. Administrative and technical support activities shall include the following:

- Coordinating work assignments between the Contractor Program Managers and Site Managers;

- Identifying project needs in terms of manpower and subcontractor's resources;
- Monitoring and controlling performance of work assignments in terms of quality, schedules and costs;
- Monitoring subcontractors as required; and,
- Attending training on EPA policies and procedures (all training to be attended by Contractor personnel to be approved by the Project Officer).

Non-site specific and related travel will be restricted and controlled by the EPA work assignment manager (WAM) to ensure proper billing, as will the billing of any subcontractor's time to the Program Support work assignment.

The Contractor shall be capable of photocopying substantial quantities of documents, often at remote locations. The Contractor shall organize records according to the Regional filing structure and, at a minimum, shall identify each document by its source, location, provider, and legal status (i.e., original, certified copy, true copy, etc.).

F. Quality Assurance

Quality assurance shall be applied to all aspects of each project and work assignment. This includes environmental sampling and data management as well as program management and project (work assignment) management. The Quality Assurance Program Plan (QAPP) shall individually address each of the aspects of Quality Assurance identified above. The QAPP shall be prepared according to QA/R-2: Interim Draft EPA Requirements for Quality Management Plans or other specified EPA guidance.

At all times under this contract, the Contractor shall utilize methods that ensure that work is performed in a manner that minimizes the need for internal revision and rework by using resources and personnel that are at an appropriate level of experience and ability. Internal peer review shall be performed before delivery of documents and other deliverables to EPA. This review shall involve personnel who are experienced in the type of activity but not otherwise involved in the specific project, as well as personnel (other than the document authors) who are familiar with the specific aspects of the project.

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With respect to environmental sample and data management, the Contractor's quality assurance program shall institute a quality assurance program which EPA must approve, assuring a known quality of performance and compliance with applicable policies and procedures by all personnel. A corporate QAPP shall be written to include both auditing and corrective action. The auditors shall report directly to the Contractor's corporate management, which will then be expected to bring the resources of the firm to focus on the resolution of any problems uncovered. Individual work assignment quality assurance project plans (QAPjP) will be required for all work involving sample collection and analysis. The QAPjP shall be prepared according to QA/R-5: EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations or other specified EPA guidance. The QAPjP will not be billed to the Program Support work assignment. The corporate QAPP will cover all other tasks, including routine health and safety screening. The QAPP will be evaluated by EPA prior to award.

The QAPP shall describe how all data generated will be assessed for accuracy, precision, completeness, representativeness, and comparability. The QAPP shall require that data be generated in a manner that allows an estimation of precision and accuracy. Relevant good laboratory practices shall be followed.

The following operations are particularly in need of quality assurance: adequacy of environmental data collection, management procedures, adherence to established methods of sample collection and analysis, demonstrations of the effectiveness of remedial alternatives, implementation of health and safety procedures, adherence to budgetary projections, adherence to facility plan, compliance with RCRA, compliance with local laws and regulations, compliance with other applicable policies and procedures, and compliance with chain-of-custody procedures. The QAPP shall include provisions for establishing and maintaining QA reporting or feedback channels to the appropriate management authority to ensure that early and effective corrective actions are taken if data quality falls below required limits.

The QAPP shall also include provisions to keep responsible management informed of the performance of all data collection systems and shall describe the mechanism(s) to be used when corrective actions are necessary. Corrective action relates to the overall QA management process: who is responsible for taking

corrective actions; when corrective actions are to be taken; and who follows-up to see what corrective actions have been taken and that they have produced the desired results. Corrective actions will be minimized through the development and implementation of internal controls prior to an adverse program impact. Each measurement system shall have limits to establish when corrective action shall be taken. A procedure shall be established for each measurement system to show that corrective action will be followed when limits for this procedure have been exceeded. The level within the organization that is responsible for taking corrective action shall be specified. The following QA activities may produce results which require that some corrective action be taken: performance audits, systems audits, and inter-laboratory or inter-field comparison studies.

The QAPP shall be accompanied by an implementation schedule to the Project Officer for review and evaluation. The corporate QAPP shall be sufficiently comprehensive so that minimal modifications are needed for individual projects.

G. Contract Close Out

Records management and file maintenance and disposition are ongoing activities required for preparation and delivery of reconciliation of contract utilization and costs, final allocation of costs, and final reports.

In order to facilitate delivery of final reports upon contract completion, the Contractor shall continuously perform records management and file maintenance and disposition. After the completion of the contract period of performance, the Contractor shall deliver to EPA reconciliation of contract utilization and costs, final allocation of costs, and final reports.